Amendments to the Claims:

The Listing of Claims (pages 3-10) replaces all prior versions of claims in the application.

All prior claims 1–306 have been canceled.

New claims 307–329 have been added to the Listing of Claims to more clearly define the invention.

Claims 1 - 157 (cancelled)

Claims 158 - 212 (cancelled)

Claims 213 - 306 (cancelled)

307. (New) A method for use in a video game apparatus having a first game system containing a first processor and a graphics coprocessor, and a separately housed portable game system containing a second processor and a discrete display device, said method comprising the steps of:

(a) generating first non-sprite polygon vertex data in said first game system that represents a shape of a first 3-dimensional player-controlled object moving in a first simulated 3-dimensional game world;

(b) rendering said first polygon vertex data in said first game system to produce pixel data that represents said first player-controlled object from a first variable 3-dimensional point of view and camera angle for display on a first display device;

(c) digitally transmitting game data from said first game system through a data transmission link to said portable game system;

(d) generating second non-sprite polygon vertex data in accordance with said transmitted game data in said portable game system to represent a shape of a second 3-dimensional player-controlled object moving in a second simulated 3-dimensional game world; and

(e) rendering said second polygon vertex data in said portable game system to produce pixel data that represents said second player-controlled object from a second variable 3-dimensional point of view and camera angle for display on said discrete display device in said portable game system.

308. (New) The method of claim 307, wherein said first display device is a discrete display device.

309. (New) The method of claim 307, wherein said discrete display device is a liquid crystal display (LCD) device.

310. (New) The method of claim 307, wherein said data transmission link comprises wireless transmission.

311. (New) The method of claim 307, further comprising the steps of:
storing said second game program in a writable memory in said first game system; and
digitally transmitting said second game program from said first game system to said portable game system for execution in said second processor.

312. (New) The method of claim 307, wherein said second player-controlled character has a body part from the group comprising: arm, leg, hand, finger, head, face, eye, mouth, teeth, clothing, tool, weapon, and object held by a character.

313. (New) The method of claim 307, wherein said portable game system comprises a touch sensor that senses variable locations of a manually operated object touching the touch sensor so as to specify said variable locations in said control data.

314. (New) The method of claim 307, wherein at least one manually operated control device causes said second point of view and camera angle to continually change so as to virtually move around said simulated object and generate said object from many different points of view and viewing angles for display on said discrete display device.

315. (New) The method of claim 307, further comprising the step of generating sprite data to represent an object for display on a display device in said portable game system.

316. (New) The method of claim 307, further comprising the step of generating third picture data representing an object from a variable 3-dimensional point of view and 3-dimensional camera angle for display on a second discrete display device in a portable game system.

317. (New) The method of claim 307, wherein said portable game system renders said second polygon data representing said second player-controlled character performing a player-selected task autonomously while movement of said first player controlled character is being manually controlled.

318. (New) The method of claim 307, wherein said first processor and said graphics coprocessor are combined into one processor.

319. (New) A data carrier for use in a video game system that has a graphics processor and a first processor that causes transmission of game data to a separately housed portable game system that has a second processor and a discrete display device, said data carrier comprising:

(a) a digital data storage medium for storing graphics data and game programs that control processing in said video game system;

(b) said game programs including instructions that cause said first processor to generate non-sprite polygon vertex data that represents a shape of a first 3-dimensional player-controlled object that is rendered by said graphics processor from a first variable 3-dimensional point of view and camera angle in a first simulated 3-dimensional game world to produce pixel data for display on a first display device; and

(c) said game programs including instructions that cause said first processor to transmit first game data to said second processor in said portable game system to cause said second processor to generate non-sprite polygon vertex data to represent a shape of a second 3-dimensional player-controlled object that is rendered from a second variable 3-dimensional point of view and camera angle in a second simulated 3-dimensional game world to produce pixel data for display on said discrete display device.

320. (New) The data carrier of claim 319, wherein said data storage medium further stores program instructions that are transmitted to said portable game system for execution in said second processor.

321. (New) The data carrier of claim 319, wherein said data storage medium is an optically coded disk.

322. (New) The data carrier of claim 319, wherein said data storage medium is a semiconductor memory.

323. (New) A video game apparatus comprising:

(a) a first processor in a first game system for generating first non-sprite polygon vertex data that represents a shape of a first 3-dimensional player-controlled object moving in a first simulated 3-dimensional game world;

(b) a graphics coprocessor in said first game system for rendering said first polygon vertex data to produce pixel data that represents said first player-controlled object from a first variable 3-dimensional point of view and camera angle to produce pixel data for display on a first display device;

(c) a data transmission link for transmitting game data from said first processor to a separately housed portable game system having a discrete display device; and

(d) a second processor in said portable game system for generating second non-sprite polygon vertex data in accordance with said transmitted game data in said portable game system to represent a shape of a second 3-dimensional player-controlled object moving in a second simulated 3-dimensional game world; and

(e) means in said portable game system for rendering said second polygon vertex data to represent said second player-controlled object from a second variable 3-dimensional point of view and variable 3-dimensional camera angle to produce pixel data for display on said discrete display device.

324. (New) The game apparatus of claim 323, wherein said data transmission link comprises wireless transmission.

325. (New) The game apparatus of claim 323, wherein a processor in said portable game system generates sprite data that represents an object for display on a discrete display device in said portable game system.

326. (New) The game apparatus of claim 323, further comprising a touch sensor in said portable game system that generates sensory data specifying variable locations of a manually operated object moving in contact with the touch sensor for processing by said second processor.

327. (New) The game apparatus of claim 323, further comprising a second discrete display device in a portable game system for displaying third picture data.

328. (New) The game apparatus of claim 323, wherein said said first display device is a discrete display device.

329. (New) A method for use in a video game apparatus having a first game system containing a first processor and a graphics coprocessor, and a separately housed portable game system containing a second processor and a discrete display device, said method comprising the steps of:

(a) generating first polygon vertex data in said first game system without use of sprite processing to generate the polygon vertex data, such that the polygon data represents a shape of a first 3-dimensional player-controlled object moving in a first simulated 3-dimensional game world;

(b) rendering said first polygon data in said first game system to produce pixel data that represents said first player-controlled object from a first variable 3-dimensional point of view and camera angle for display on a first display device;

(c) digitally transmitting game data from said first game system through a data transmission link to said portable game system;

(d) generating second polygon vertex data in accordance with said transmitted game data in said portable game system without use of sprite processing to generate the polygon vertex data, such that the polygon vertex data represents a shape of a second 3-dimensional player-controlled object moving in a second simulated 3-dimensional game world; and

(e) rendering said second polygon data in said portable game system to produce pixel data that represents said second player-controlled object from a second variable 3-dimensional point of view and camera angle for display on said discrete display device in said portable game system.